

ALGÆ RHODIACEÆ.

A LIST OF RHODE ISLAND ALGÆ, COLLECTED AND PREPARED

BY

STEPHEN T. OLNEY,

IN THE YEARS 1846-1848, NOW DISTRIBUTED FROM HIS

OWN HERBARIUM.

PROVIDENCE, R. I.,

1871.

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To the marine portion of this list, are added those species enumerated by Prof. Harvey, in *Nereis Boreali Americanae*, which have escaped my observation, and have been found by others in Rhode Island.

Of the fresh water species, I have few for distribution. These were obtained mainly in the environs of this City, and were placed in twenty-seven small vials in Goadsby's solution, and sent to Prof. Harvey, who submitted them to the judgment of the most learned English botanist in this particular department, G. H. K. Thwaites, Esq. then of Bristol, England. The large number of species found in this collection, in so limited a range, and collected within a very short period, is surprising, and shows what more persistent collections will develop. I have not time to collate the numerous publications of the lamented Prof. Bailey, or I might have made the list of this portion of Rhode Island plants more complete. The Desmidiæ were elaborated by Ralfs in 1848; this author was in correspondence with Prof. Bailey, and I have added from his work, *British Desmidiæ* those species as given from Rhode Island, or in a geographical range including it.

Providence, December 1st, 1871.

PART I.

MELANOSPERMÆ, OR OLIVE COLORED ALGÆ.

1. SARGASSUM VULGARE, *Ag.*—*Harv. Ner. Bor. Am.* 1. 57. Southern Rhode Island.
2. MONTAGNEI, *Bailey.*—*Harv. Ner. Bor. Am.* 1. 58. (*S. vulgare*, var. *tenuifolium*.) *Harv!* in Olney's R. I. plants. Little Compton.
3. FUCUS NODOSUS, *L.*—*Harv. Ner. Bor. Am.* 1. 68. Common.
4. VESCICULOSUS, *L.*—*Harv. Ner. Bor. Am.* 1. 71. Common.
5. LAMINARIA SACCHARINA, *Lamour.* *Harv. Ner. Bor. Am.* 1. 92. Southern Rhode Island.
6. TRILAMINATA, *Harvey in Olney's R. I. plants.* *Ner. Bor. Am.* 1. 93. A single frond of this doubtful species was found by me, floating at Narragansett Pier.
7. DIGITATA, *Lamour.*—*Harv. Ner. Bor. Am.* 1. 94. Narragansett Pier, floating only.
8. CHORDA FILUM, *Stack.*—*Harv. Ner. Bor. Am.* 1. 98. Southern Rhode Island
9. LOMENTARIA, *Lyngb.*—*Harv. Ner. Bor. Am.* 1. 98. Southern Rhode Island.
10. STILOPHORA RHIZOIDES, *J. Ag.*—*Harv. Ner. Bor. Am.* 1. 112. Shores Southern Rhode Island; rare.
11. DICTYOSIPHON FENICULATUS,—*Grev. Harv. Ner. Bor. Am.* 1. 114. Southern Rhode Island.
12. PUNCTARIA TENUISSIMA, *Grev.*—*Harv. Ner. Bor. Am.* 1. 115. Sogconnet Point.
13. PLANTAGINEA, *Grev.*—*Harv. Ner. Bor. Am.* 1. 115. Point Judith.
14. CHORDARIA FLAGELLIFORMIS, *Ag.*—*Harv. Ner. Bor. Am.* 1. 123. Southern Rhode Island,
15. DIVARICATA, *Ag.*—*Harv. Ner. Bor. Am.* 1. 124. Newport.
16. LEATHSIA TUBERIFORMIS, *S. F. Gray.*—*Harv. Ner. Bor. Am.* 1. 129. Point Judith and Block Island.
17. ELACHISTA FUCICOLA, *Fras.*—*Ner. Bor. Am.* 1. 131. Southern Rhode Island.

18. CLADOSTEPHUS SPONGIOSUS, *Ag.-Harv. Ner. Bor. Am.* 1.134. Newport.
19. VERTICILLATUS, *Ag.-Harv. Ner. Bor. Am.* 1.135. Newport.
20. MYRIOTRICHIA FILIFORMIS, *Griff.-Harv. Ner. Bor. Am.* 3.124. Newport, on *Chorda lomentaria*
21. ECTOCARPUS LITTORALIS, *Lyngb.-Harv. Ner. Bor. Am.* 1.139. Newport.
22. SILICULOSUS, *Lyngb.-Harv. Ner. Bor. Am.* 1.139. Providence.
23. VIRIDIS, *Harv. Ner. Bor. Am.* 1.140. Providence, *C. obtusangulus* *Harv. Mss.*
24. FASCICULATUS, *Harv. Ner. Bor. Am.* 1.141. Southern Rhode Island.

PART II.

RHODOSPERMÆ, OR RED ALGÆ.

25. CHONDRIA DASYPHYLLA, *Ag.-Harv. Ner. Bor. Am.* 2.20. Southern Rhode Island.
26. BAILEYANA, *Mont.-Harv. Ner. Bor. Am.* 2.20. Little Compton. *C. dasyphylla*, *Harv. Mss.* 1847.
27. RHODOMELA SUBFUSCA, *Ag.-Harv. Ner. Bor. Am.* 2.34. Providence.
28. POLYSIPHONIA SUBTILISSIMA, *Mont.-Harv. Ner. Bor. Am.* 2.34. Providence.
29. OLNEYI, *Harv. in Olney's R. I. plants*, April 1847. *Harv. Ner. Bor. Am.* 2.40. Providence.
30. HARVEYI, *Bailey, Sill. Jour.* July 1848.-*Harv. Ner. Bor. Am.* 2.42. Providence, fide *Dr. Farlow* who so names my specimens.
31. FIBRILLOSA, *Grev.-Harv. Ner. Bor. Am.* 2.43. Newport, fide *Harvey*.
32. VIOLACEA, *Grev.-Harv. Ner. Bor. Am.* 1.2.44. Point Judith fide *Farlow*, who so names my specimens.
33. PARASITICA, *Grev.-Harv. Ner. Bor. Am.* 2.46. Providence, fide spec. in *Herb. Hooper*.

34. *POLYSIPHONIA ATRORUBESCENS*, Grev.-Harv. *Ner. Bor. Am.* 2. 48.
Little Compton, Dr. Durkee.
35. *NIGRESCENS*, Grev.-Harv. *Ner. Bor. Am.* 2. 49.
Providence to Block Island.
36. *NIGRESCENS*, var. *disticha*, Harv. *Ner. Bor. Am.*
2. 50. Newport.
37. *FASTIGIATA*, Grev.-Harv. *Ner. Bor. Am.* 2. 54.
Southern Rhode Island.
38. *DASYA ELEGANS*, Ag.-Harv. *Ner. Bor. Am.* 2. 60. Providence
to Block Island.
39. *CHAMPIA PARVULA*, -Harv. *Ner. Bor. Am.* 2. 76. (*Chylocladia*
parvula, Hook.) Southern Rhode Island.
40. *CORALLINA OFFICINALIS*, L.-Harv. *Ner. Bor. Am.* 2. 82. Newport.
41. *MELOBESIA PUSTULOSA*, Lamour. Narragansett Pier.
42. *GRINNELLIA AMERICANA*, Harv. *Ner. Bor. Am.* 2. 92. (*Delesseria*
Americana.) Ag. Providence.
43. *GRACILARIA MULTIPARTITA*, J. Ag. var. *angustissima*, -Harv.
Ner. Bor. Am. 2. 107. Providence.
44. *POLYIDES ROTUNDUS*, Grev.-Harv. *Ner. Bor. Am.* 2. 128. New-
port, Bailey.
45. *NEMALION MULTIFIDUM*, J. Ag.-Harv. *Ner. Bor. Am.* 2. 134.
Southern Rhode Island.
46. *RHODYMENIA PALMATA*, Grev.-Harv. *Ner. Bor. Am.* 2. 148.
Southern Rhode Island.
47. *CORDYLECLADIA* ? *HUNTII*, Harv. *Ner. Bor. Am.* 2. 155. rare !
Mr. Geo. Hunt. The discoverer furnished me a
specimen to send to Prof. Harvey (who named
it *Mesogloia Huntii*.) and gave me another for
my collection.
48. *PHYLLOPHORA MEMBRANIFOLIA*, J. Ag.-Harv. *Ner. Bor. Am.* 2.
165. Southern Rhode Island.
49. *AHNFEITIA PLICATA*, Fries.-Harv. *Ner. Bor. Am.* 2. 167. South-
ern Rhode Island.
50. *CYSTOCLONIUM PURPURASCENS*, Kutz.-Harv. *Ner. Bor. Am.* 2. 170.
Providence to Newport. My earlier collections
of this were first named, by Prof. Harvey, *Gra*
cilaria purpurascens, Grev. and then *Hypnea*
purpurascens, Harv. *Phy. Brit.*
51. *CHONDRUS CRISPUS*, Lyngb.-Harv. *Ner. Bor. Am.* 2. 181. New-
port and Sagconnet.

52. CHYLOCLADIA BAILEYANA, -*Harv. Ner. Bor. Am.* 2. 186. Narragansett Pier.
53. ROSEA, -*Harv. Ner. Bor. Am.* 2. 186. (*Chrysimenia rosea*, Harv.) Newport.
54. CERAMIVM RUBRUM, *Ag.*-*Harv. Ner. Bor. Am.* 2. 213. Providence to Block Island.
55. VAR. *Harv. Ner. Bor. Am.* 2. 214. Newport.
56. DIAPHANUM, *Roth*-*Harv. Ner. Bor. Am.* 2. 215. Providence to Newport.
57. FASTIGIATUM, *Harv. Ner. Bor. Am.* 2. 117. Newport.
58. Ptilota elegans, *Bonnem*-*Harv. Ner. Bor. Am.* 2. 224. Newport. (*P. sericea*, Harv. Mss.)
59. GRIFFITHSIA CORALLINA? *Ag.* var. *tenuis*, *Harv. Ner. Bor. Am.* 2. 228. Providence.
60. CALLITHAMNION TETRAGONUM, *Ag.* *Harv. Ner. Bor. Am.* 2. 230. Newport.
61. BAILEYI, *Harv. Ner. Bor. Am.* 2. 230. Newport, fide Farlow, who has seen my specimens.
62. BORRERI, *Ag.*-*Harv. Ner. Bor. Am.* 2. 233. Newport, *Dr. Durkee*. Sogconnet, *Mr. Congdon*.
63. BYSSOIDEUM, *Arn.*-*Harv. Ner. Bor. Am.* 2. 234, Providence.
64. DIETZLÆ, *Hooper.*-*Harv. Ner. Bor. Am.* 2. 236. Narragansett Bay.
65. CORYMBOSUM, *Ag.*-*Harv. Ner. Bor. Am.* 2. 236. Providence, Bailey.
66. SERIOSPERMUM, *Griff.*-*Harv. Ner. Bor. Am.* 2. 237. Rhode Island, Bailey.
67. TURNERI, *Ag.*-*Harv. Ner. Bor. Am.* 2. 241, Rhode Island.
68. ROTHII, *Lgnb.*-*Harv. Ner. Bor. Am.* 2. 242. Rhode Island.

PART III.

CHLOROSPERMÆ, OR GREEN ALGÆ.

69. PORPHYRA VULGARIS, *Ag.*-*Harv. Ner. Bor. Am.* 3. 53. Newport.
70. BANGIA FUSCOPURPUREA, *Lyngb.* *Harv. Ner. Bor. Am.* 3. 54. Southern Rhode Island.

71. ENTEROMORPHA INTESTINALIS, *Lyngb. Harv. Ner. Bor. Am.* 3. 56.
Providence to Newport.
72. COMPRESSA, *Grev.-Harv. Ner. Bor. Am.* 3. 56.
Southern Rhode Island.
73. CLATHRATA, *Grev.-Harv. Ner. Bor. Am.* 3. 56.
Newport.
74. ULVA LATISSIMA, *L.-Harv. Ner. Bor. Am.* 3. 59. Providence.
75. LACTUCA, *L.-Harv. Ner. Bor. Am.* 3. 60. Providence.
76. TETRASPORA LACUNOSA, *Chauv.-Harv. Ner. Bor. Am.* 3. 61. *T. perforata*, *Bailey Mss.* Providence.
77. LUBRICA, *Ag.* Providence.
78. BATRACHOSPERMUM PULCHERRIMUM, *Hass.* Providence.
79. MONILIFORME, *Roth.-Harv. Ner. Bor. Am.* 3. 63. Providence.
80. CHÆTOPHORA ENDIVÆFOLIA, *Ag.-Harv. Ner. Bor. Am.* 3. 69.
Providence.
81. DRAPARNLDIA, GLOMERATA, *Ag.-Harv. Ner. Bor. Am.* 3. 72.
Providence.
82. STYGEOCLONIUM MINUTUM, *Kutz.* Providence.
83. CLADOPHORA RUPESTRIS, *L.-Harv. Ner. Bor. Am.* 3. 74. Newport.
84. GLAUDESCENS, *Griff.-Harv. Ner. Bor. Am.* 3. 77.
Rhode Island.
85. REFRACTA, *Roth.-Harv. Ner. Bor. Am.* 3. 79. South-
ern Rhode Island.
86. RUDOLPHIANA, *Ag.-Harv. Ner. Bor. Am.* 3. 80.
Providence.
87. GRACILIS, *Griff.-Harv. Ner. Bor. Am.* 3. 81. Little
Compton.
88. FRACTA, *Fl. Dan.-Harv. Ner. Bor. Am.* 3. 82.
Rhode Island, *Bailey.*
89. CHÆTOMORPHA ÆREA, *Dillw.-Har. Ner. Bor. Am.* 3. 86. New-
port, etc.
90. OLNEYI, *Harv. Ner. Bor. Am.* 3. 86. Little Compton.
91. LONGIARTICULATA, *Harv. Ner. Bor. Am.* 3. 86.
Little Compton.
92. var. crassior, *Harv. Ner. Bor. Am.* 3. 86. Little Compton.
93. SUTORIA, *Berk.-Harv. Ner. Bor. Am.* 3. 87. New-
port.

Zygnemaceæ, etc.

94. ZYGHEMA MALFORMATUM, *Hass.* 1. 147. Providence.
95. CATENÆFORME, *Hass.* 1. 147. Providence.
96. THWAITESII, *Olney, n. s.* Near *Z. subventricosum*, Providence.
97. LONGATUM, *Hass.* 1. 151. Providence.
98. STRIATA, *Olney, n. s.* "cells evidently striated," Thwaites. Providence.
99. TYNDARIDEA BICORNIS ? *Hass.* 1. 162. Providence.
100. INSIGNIS ? *Hass.* 1. 163. Providence.
101. MESOCARPUS PARVULUS, *Hass.* 1. 169. Providence.
102. MOUGEOTIA GENUFLEXA, *Ag. Hass.* 1. 173. Providence.
103. VESICULIFERA CONCATINATA, *Hass.* 1. 201. Providence.
104. ÆQUALIS, *Hass.* 1. 205. Providence.
105. BOMBYCINA, *Hass.* 1. 208. Providence.
106. CANDOLLII, *Hass.* 1. 208. Providence.
107. BULBOCHÆTE THWAITESII, *Olney n. s.* Providence.
108. LYNGBYA MAJUSCULA, *Harv. Bor. Am.* 3. 101. Providence.
109. SPHÆROPLEÆ VIRESCENS, *Berk.* Providence.
110. PUNCTALIS, *Berk.* Providence.
111. TOLYPOTHRIX DISTORTA, *Kutz. Hass.* 1. 240.
112. CALOTHRIX CONFERVICOLA, *Ag.-Harv. Ner. Bor. Am.* 3. 105. Providence.
113. SCOPULORUM, *Ag.-Harv. Ner. Bor. Am.* 3. 105. Providence.

Desmidiææ.

114. HYALOTHECA DISSILIENS, *Brev.-Ralfs Des.* 51. (*Gloeoprium*.) Providence.
115. MUCOSA, *Ehrh.-Ralfs Des.* 53. Providence.
116. DIDYMOPRIUM GREVILLII, *Kutz.-Ralfs Des.* 61. Rhode Island, Bailey.
117. BORRERI, *Ralfs Des.* 58. Rhode Island, Bailey.
118. DESMIDIUM SWARTZII, *Ag.-Ralfs Des.* 61. Throughout United States, Bailey.
119. APTOGONUM BAILEYI, *Ralfs Des.* 209. Worden's Pond, Rhode Island. Bailey.

120. MICRASTERIAS ROTATA, *Ralfs Des.* 71. Providence.
121. RADIOSA, *Ag.—Ralfs Des.* 72. Maine to Virginia, *Bailey*.
123. FURCATA, *Ralfs Des.* 73. Worden's Pond, Rhode Island, *Bailey*.
124. CRUX-MELITENSIS, *Ralfs Des.* 73. Maine to Virginia, *Bailey*.
125. TRUNCATA, *Breb.—Ralfs Des.* 75. United States, *Bailey*.
126. FOLIACEA, *Bailey—Ralfs Desm.* 210. Worden's Pond, Rhode Island, *Bailey*.
127. BAILEYI, *Ralfs Desm.* 211. Rhode Island, *Bailey*.
128. EUASTRUM OBLONGUM, *Ralfs Des.* 80. Rhode Island, *Bailey*.
129. CRASSUM, *—Kutz. Ralfs Des.* 81. Rhode Island, *Bailey*.
130. ANSATUM, *Ehrh. Ralfs Des.* 85. *E. binale Kntz.* Providence.
131. ELEGANS, *Kutz—Ralfs Des.* 89. Providence.
132. BINALE, *Ralfs Desm.* 91. Providence.
133. COSMARIUM CUCUMIS, *Corda.—Ralfs. Desm.* 93. United States, *Bailey*.
134. BIOCULATUM, *Ralfs Des.* 95. Providence.
135. MENEGHINII, *Breb. Ralfs Des* 96. United States, *Bailey*.
136. CREMATUM, *Ralfs Des.* 96. Providence.
137. AMENUM, *Breb.—Ralfs. Des.* 102. Providence.
138. ORNATUM, *Ralfs Des.* 104. Providence.
139. CONNATUM, *Breb.—Ralfs Des.* 108. Providence.
140. CUCURBITA, *Ralfs Des.* 109. Providence.
141. GRANDITUBERCULATUM, *Olney n. s.*; "near *C. cucumis*, but with large tubercles on the frond." Providence.
142. STAUSTRUM ORBICULARE, *Ralfs. Des.* 125. Providence.
143. HIRSUTUM, *Ralfs Des.* 127. Providence.
144. HYSTRIX, *Ralfs Des.* 128. Providence.
145. GRACILE, *Ralfs Des.* 136. Providence.
146. TETRACERUM, *Ralfs Des.* 137. United States, *Bailey*.
147. CYRTOCERUM, *Breb.—Ralfs Des.* 139. Providence.

148. TETMEMORAS BREBISSEI, *Ralfs Des.* 145. Providence.
149. GRANULATUS, *Ralfs Des.* 146. Providence.
150. PENIUM MARGARITACEUM, *Breb.-Ralfs Des. (Closterium Eh.)*
Providence.
151. DIGITUS, *Breb.-Ralfs Des.* 151. (*Closterium lamellosum.*)
152. DOCIDIUM NODULOSUM, *Breb.-Ralfs Des.* 155. Maine to Vir-
ginia, *Bailey.*
153. BACULUM, *Breb.-Ralfs Des.* 158. United States,
Bailey
154. NODOSUM, *Bailey-Ralfs Des.* 218. United States
Bailey.
155. CONSTRICTUM, *Bailey-Ralfs Des.* 218. Worden's
Pond, *Bailey.*
156. VERRUCOSUM, *Bailey-Ralfs Des.* 218. Rhode Island.
Bailey.
157. VERTICILLATUM, *Bailey.-Ralfs Des.* 218. Worden's
Pond, *Bailey.*
158. CLOSTERIUM LUNULA, *Ehrh.-Ralfs Des.* 163. New England,
Bailey.
159. MONILIFERUM, *Ehrh. Ralfs Des.* 163. New England,
Bailey.
160. STRIOLATUM, *Ehrh.-Ralfs Des.* 173. New England,
Bailey.
161. CUSPIDATUM, *Bailey-Ralfs Des.* 219. Worden's
Pond, *Bailey.*
162. PEDIASTRUM TETRAS, *Ralfs Des.* 182. New England, *Bailey.*
163. HEPTACTIS, *Ralfs Des.* 183. Providence.
164. BORYANUM, *Menegh.-Ralfs Des.* 187. Maine to
Mexico, *Bailey.*
165. ELLIPTICUM, *Hass. Ralfs Des.* 188. Maine to Vir-
ginia, *Bailey.*
166. SCENEDESMUS QUADRICANDA, *Breb. Ralfs Des.* 190. Maine to
Virginia, *Bailey.*
167. OBTUSUS, *Meyen.-Ralfs Des.* 193. Maine to Vir-
ginia, *Bailey.*

Diatomaceæ.

168. EUNOTIA TETRAODON, *Eh. Pritch. Inf.* 763. Providence.
169. DIADEMA, *Eh. Pritch. Inf.* 763. Providence.
170. HIMANTIDIUM PECTINALE, *Kutz. Pritch. Inf.* 765. Providence.

171. HIMANTIDIUM ARCUS, *Eh. Pritch. Inf.* 765. Providence.
172. MERIDION CONSTRICTUM, *Ralfs Pritch. Inf.* 768. Providence.
173. ODONTIDIUM HYEMALE, *Kutz. Pritch. Inf.* 775. *C. turgidulum*.
Providence.
174. FRAGILLARIA CAPUCINA, *Kutz. Pritch. Inf.* 776. Providence.
175. PECTINALIS, *Eh. Pritch. Inf.* 777. Providence.
176. VIRESCENS, *Ralfs. Pritch. Inf.* 777. Providence.
177. SYNEDRA ULNA, *Eh. Pritch. Inf.* 788. Providence.
178. SURIRELLA BISERIATA, *Breb. Pritch. Inf.* 794. (*S. bifrons*.) Providence.
179. TABELLARIA FLOCCULOSA, *Kutz. Pritch. Inf.* 807. Providence.
180. THWAITESII, *Olney n. s.* Allied to *C. flocculosa*,
but differing in inflation and end view. Providence.
181. COCCONEMA LANCEOLATUM, *Eh. Pritch. Inf.* 877. Providence.
182. CYMBIFORME, *Eh. Pritch. Inf.* 818. Providence.
183. SPHENELLA ROSTELLATA, *Kutz. Pritch. Inf.* 886. Providence.
184. GOMPHONEMA CONSTRICTUM, *Eh. Pritch. Inf.* 887. Providence.
185. TRUNCATUM, *Eh. Pritch. Inf.* Providence.
186. MINUTUM, *Eh. Pritch. Inf.* Providence.
187. NAVICULA GRACILIS, *Eh. Pritch. Inf.* 906. Providence.
188. VIRIDIS, *Kutz.* Providence.
189. STAURONEIS PHÆNICENTERON, *Eh. Pritch. Inf.* Providence.

Omission.

42. *bis.* DELESSERIA SINOUSA, *Lamour.-Harv. Bor. Am.* 2. 93.

